CHEM 2362 Organic Chemistry Laboratory II Lec. 1 Lab. 3 Cr. 2

Effective Date: Summer 2004-2005

Course Description

Pre or Corequisite: A grade of "C" or better in CHEM 2262. A continuation of CHEM 2361.

Course Objectives

Students will:

1. Understand the role of functional groups in physical and chemical behavior.
2. Understand the principles of separation.
3. Understand the principles of purification.
4. Understand techniques used in identification.
5. Understand the use and application of instrumentation.
6. Understand the use and applications of laboratory equipment.

Procedures to Evaluate these Objectives

1. Prelaboratory worksheets
2. Lecture discussion
3. Laboratory reports
4. Midterm and final exam

Use of Results of Evaluation to Improve the Course

1. Student responses from in-class discussion will be used to provide immediate feedback to students on concept misunderstandings.
2. Prelaboratory worksheets will be graded with written evaluations and returned prior to turning in laboratory reports. Evaluation of students' understanding will be used to modify lecture.
3. Laboratory reports and midterms will be graded with written evaluation and returned. These evaluations will be used to better understand student difficulties with concepts.
4. All evaluation methods will constantly be monitored to determine if there is a more effective method of presenting the material.

Detailed Topical Outline

1. Basic Organic Reactions
2. Methods of Separation
3. Methods of Purification
4. Instrumentation
   a. Chromatography
   b. Polarimetry
   c. Refractometry
5. Spectroscopy
6. Identification